

1. [Preface](#)

Preface

Comparative Oral Biology is designed for the one-semester course taken by pre-dental, pre-med and evolutionary biology students. The textbook contains material by the author, from OpenStax books such as Anatomy and Physiology, Biology and Microbiology, from OpenStax CNX, Wikipedia and from Wikimedia Commons.

Welcome to *Comparative Oral Biology*. We created this textbook to support the multidisciplinary study of the mouth and associated structures. It integrates aspects of evolution, development, ecology, microbiology, structure and function. The main goal is to help college students interested in integrative biology, otorhynolaryngology or dentistry to build a comprehensive background in oral biology as they prepare for graduate school.

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License

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Cost

This textbook is available for free online, and in low-cost print and tablet editions.

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Anatomy and Physiology can be easily customized using our online platform (<https://openstaxcollege.org/textbooks/anatomy-and-physiology/adapt>). The text is arranged in a modular chapter format. Simply

select the content most relevant to your syllabus and create a textbook that addresses the needs of your class. This customization feature will ensure that your textbook reflects the goals of your course.

About *Comparative Oral Biology*

Comparative Oral Biology is designed for a one-semester elective course taken by junior and senior biology, pre-dental and pre-medical students. It supports effective teaching and learning, and prepares students for further learning and future careers.

Content

The content in this book is primarily organized by function (mastication, olfaction) within an ecological and evolutionary context. Each subject is explored in anatomy, physiology, diversity and main clinical issues. This is in contrast with the traditional organization of content by body system in courses and books on Introductory Biology, Human Anatomy or Human Physiology.

The goal is to help students make connections between concepts learned in their introductory courses. After having learned general anatomy and physiology through "bottom-up" approaches, we study the mouth and associated structures through a "top-down" approach. This stimulates the identification of interactions across body systems and formulation of integrative conclusions.

Chapter 01 - Preface

Chapter 02 - Origin and development

Chapter 03 - Respiration and olfaction

Chapter 04 - Ingestion and gustation

Chapter 05 - Mastication

Chapter 06 - Salivation

Chapter 07 - Swallowing

Chapter 08 - Voice

Chapter 09 - Hearing